



List of invited talks

The papers indicated with a * are included in this volume.

- G. Alefeld, The Kantorovich theorem and the verification of solution
L. Atanassova, A unified approach for deriving higher-order iterative methods for approximating zeros of analytic functions
C.G. Broyden, An LP algorithm
* X. Chen, Newton's method for quadratic stochastic programs with resource via nonsmooth equations
P. Deufhard, The cascade principle: simultaneous adaptive multivalued discretization and iterative solution of partial differential equations
J.A. Ford, Multi-step quasi-Newton methods for optimization
* A. Frommer, Parallel validated iterative methods
* M. Fukushima, SOR and Jacobi-type methods for solving quadratic programming problems with interval constraints
* G. Heindl, Experiences with some methods for enclosing solutions of nonlinear systems of equations
* J.P. Herzberger, Lower bounds for the R -order of convergence of simultaneous inclusion methods for polynomial roots and related iteration methods
U. Kulish, Programming environments for scientific computation with result verification: PASCAL-XSC and C-XSC
* T.-Y. Li, A continuation approach to the eigenvalue problem
* I. Marek, A nonlinear model involving M -operators
* J.M. Martínez, Secant preconditioners
* G. Mayer, Epsilon-inflation for systems of nonlinear equations
M.Z. Nashed, Newton-like methods for the ill-posed problem
A. Neumaier, Global, rigorous and realistic bounds for the solution of dissipative differential equations
W. Niethammer, Hybrid techniques for the iterative solution of large nonsymmetric systems of linear equations
* S. Oishi, Numerical verification of existence of nonlinear operator equations
K. Okumura, On the application of interval computation to linear network analysis
Y. Oyanagi, The multi-grid preconditioned conjugate gradient method
* M. Plum, Verified solutions of nonlinear boundary value problems
* L. Qi, Nonsmooth equations and nonsmooth Newton's methods

- * S.M. Rump, Verified solution of large systems and global optimization
- S. Smale, Newton's method and complexity
- K. Tanabe, Successive rank-one modification algorithm for solving a system of linear equations with verification
- * P. Tseng, Error bounds and convergence analysis of optimization algorithm
- H. Walker, Newton iterative and inexact Newton methods
- * D. Wang, The theory of Smale's point estimation and its applications
- Z. You, Special matrices and linear/nonlinear iterative methods
- T.J. Ypma, Historical development of the Newton–Raphson method